

WHAT IS CLAIMED IS:

1. A process for production of a phenolic novolak,  
comprising:

5 a step of conducting a heterogeneous reaction of a  
phenol and an aldehyde in the presence of a phosphoric  
acid and an unreactive oxygen-containing organic  
solvent as a reaction cosolvent.

2. The process for production of a phenolic novolak  
10 according to claim 1, wherein the phosphoric acid is 5  
parts by mass or more per 100 parts by mass of the  
phenol.

3. The process for production of a phenolic novolak  
15 according to claim 1, wherein the phosphoric acid is  
25 parts by mass or more per 100 parts by mass of the  
phenol.

4. The process for production of a phenolic novolak  
20 according to any of claims 1 to 3, wherein the  
reaction cosolvent is 5 parts by mass or more per 100  
parts by mass of the phenol.

5. The process for production of a phenolic novolak  
25 according to any of claims 1 to 3, wherein the  
reaction cosolvent is 10 to 200 parts by mass per 100  
parts by mass of the phenol.

6. The process for production of a phenolic novolak  
30 according to any of claims 1 to 5, wherein the

reaction cosolvent is at least one element selected from the group consisting of an alcohol, a polyalcohol-based ether, a cyclic ether, a polyalcohol-based ester, a ketone and a sulfoxide.

5

7. The process for production of a phenolic novolak according to any of claims 1 to 6, wherein 0.40 to 1.0 mol of the aldehyde is reacted with 1 mol of the phenol.

10

8. The process for production of a phenolic novolak according to any of claims 1 to 7, wherein a surface active agent is further present in the step.

15

9. The process for production of a phenolic novolak according to any of claims 1 to 8, wherein the heterogeneous reaction is conducted under pressure of 0.03 to 1.50 MPa.